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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|-------------|----------------------|---------------------|------------------|
| 10/671,589 | 09/29/2003 | Joseph Schlessinger | 034536-0717 | 1488 |
| 22428 | 7590 | 11/08/2005 | EXAMINER | |
| FOLEY AND LARDNER LLP | | | JALLA, SANJOO | |
| SUITE 500 | | | ART UNIT | |
| 3000 K STREET NW | | | PAPER NUMBER | |
| WASHINGTON, DC 20007 | | | 1644 | |

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,589

Applicant(s)

SCHLESSINGER ET AL.

Examiner

Sanjoo Shree Jalla

Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-45 is/are pending in the application.
- 4a) Of the above claim(s) 17-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1644

Detailed Action

1. The examiner of this application in the PTO has been changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Sanjoo Jalla, Group Art Unit 1644, Technology Center 1600.
2. Claims 1-10 have been cancelled.
Claims 11-45 are pending.
Further, during a telephone conversation with Vid Mohan Ram on 10/05/05, a provisional election was made without traverse to prosecute the invention of claims 11-16. Therefore, claims 11-16 are under consideration in the instant application.
3. The abstract of the disclosure is objected to as not accurately describing the claimed inventions. Correction is required. See MPEP § 608.01(b).
4. Applicant should restrict the title to the claimed invention. A new title is required that is clearly indicative of the invention to which the claims are directed.
5. Applicant's submission of Search Reports on the IDS (09/29/03) is acknowledged, however references AC-CD were not located.
6. The instant claims may not have the benefit under 35 U.S.C. 120 of all the parent filing dates. The instant application claims the benefit of priority to application, which is a continuation-in-part of the U.S. application Serial No. 07/551,270, filed July 11, 1990, now abandoned. The '270 application does not disclose human receptor-type phosphotyrosine phosphatase alpha (RPTP α) protein. They disclose mouse RPTP protein. Accordingly, the benefit of priority of the '270 application is denied. The priority of the instant application is the filing date of CIP 07/654188 filed on 02/26/1991.
7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

Art Unit: 1644

said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jirik et. al., (submitted sequence in June 1990, to EMBL data library) in view of Campbell (Monoclonal Antibody Technology, 1985; 2nd Edition).

Jirik et. al. teaches the protein that has 100% homology with SEQ ID NO. 1.

Jirik et. al. does not teach an antibody to protein consisting of amino acids represented by SEQ ID NO. 1.

Campbell teaches " it is customary now for any group working on a macromolecule to make monoclonal antibodies to it, sometimes without a clear objective for their application" (see Chapter 1, page 29, last paragraph, and lines 7-10).

It would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to apply the teachings of Campbell to make an antibody to the human RPTP protein (SEQ ID NO:1).

One of ordinary skill in the art at the time the invention was made would have been motivated to make antibodies (monoclonal or polyclonal) against the protein of SEQ ID NO. 1 because it is routine to study a protein's properties or biological functions and to do so, making an antibody would be the first step.

From the combined teaching of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention.

8. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jirik et. al., (submitted sequence in June 1990, to EMBL data library) in view of Campbell (Monoclonal Antibody Technology, 1985; 2nd Edition) and Sap et. al., (Proc. Natl. Acad. Sci. 1990; 87: 6112-6116).

Jirik et. al. and Campbell have been discussed above. Jirik et. al. does not teach the antibody wherein the antibody is specific for residues 1 to 150 of the amino acid sequence represented by SEQ ID NO. 1 or the extracellular domain.

Art Unit: 1644

Sap et. al. teaches that monoclonal antibodies to the extracellular domains of R-PTPases can be used to study the effects of cross-linking on various cellular activities (see page 6116, Left hand column, second paragraph, lines 5-8).

It would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to apply the teachings of Campbell to make an antibody to a given protein to Sap et.al. to make the antibody against extracellular domain comprising epitope that is within residues 1-150 of the amino acid sequence depicted in SEQ ID NO. 1.

One of ordinary skill in the art at the time the invention was made would have been motivated to make the antibody against the epitope that is within the residues 1-150 of the amino acid sequence depicted in SEQ ID NO. 1. because the extracellular domain part of the R-PTP plays an important role in cellular control mechanism and development of antibodies directed against the extracellular domain of the protein can allow a person to study the cross linking of R-PTPases which has profound effects on various cellular activities as taught by Sap et.al. (see page 6116, Left hand column, second paragraph, lines 5-8). Further, as the extracellular domain of the protein is involved in different regulatory mechanisms making antibodies against that domain will help a person to study different regulatory mechanisms by modifying signaling of protein.

From the combined teaching of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention.

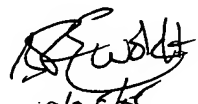
No claim is allowed.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanjoo Jalla whose telephone number is (571) 272-4453. The examiner can normally be reached Monday through Friday from 7:30 am to 4:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.
10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from

Art Unit: 1644

either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sanjoo Jalla, Ph.D.
Patent Examiner
Technology Center 1600


10/25/08
G.R. EWOLDT, PH.D.
PRIMARY EXAMINER